$$CH_{3} = \frac{1}{C} = \frac{1}{$$

REMARKS

The Examiner is thanked for the courtesy of a telephone interview and for affording applicants the opportunity to clarify certain matters.

- 1. Claims 36 and 41 recite a structure for element "Z" which includes an R₄ which was left undefined after the previous amendment. The intended structure is of the type shown as compound 189 (p.70) or 195 (p.71). These compounds have a bifunctional Tc⁹⁹-labeled moiety to each of which a cyclic amino acid of the invention is covalently bound. The amended claims present the intended structure for "Z" unambiguously.
- 2. Per the Examiner's inquiry, applicants' attorney has confirmed with inventor Goodman that the structure shown as "Z" in claim 32 is an art-recognized way of writing the intended structure. The complex containing a Tc^{99m} atom is bound in a coordination complex



analogous to a ferrocene, except that the tricarbonyl forms one side of the pi-electron "sandwich" while the cyclopentadiene structure provides the other. Specific bond lines to the cyclopentadiene are not drawn since the Tc^{99m} is not covalently bonded thereto. The structure of such compounds has been published by Wenzel et al (reference to be provided).

3. A copy of the claims allowed in the parent application, USSN 08/554,906 is supplied herewith. The Examiner may review the claims to determine whether an issue of double-patenting exists.

It is believed that no fee is required with this submission. If this is incorrect, please charge any deficiency to Deposit Account No. 07-1969.

Respectfully submitted,

brown I Speenler.

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Attorney Docket No. 64-95A

bmk: June 3, 1998

64-95 Claims

As amended March 5, 1997; September 18, 1997; and March 12, 1998 and allowed.

1 1. An amino acid analog having the general structure

where
$$R_1$$
 is X , X -CH=CH-, or R_3
$$R_2$$
 is H , or R_3 if R_1 is R_3 ,

$$R_3$$
 is X-(CH)_j- C_mH_n - CH_q

2 such that

3

R₃

CH₂

COOH

cyH₂

NH₂

is formed

4 where x is 0 or 1, 5 y is 1 or 2. 6 z is 1, 2, 3 or 4 and z > y if y is 2, 7 q is 1 or 0 if n is 1 and j is 0. 8 n is 1 or 2, but 0 if m is 0. 9 m is 0 or 1, 10 j is 0 or 1, and X is ¹⁸F, ¹²³I, ¹²⁵I, ¹³¹I, ⁷⁵Br, ⁷⁶Br, ⁷⁷Br, or ⁸²Br. 11



- 2. A compound of claim 1, wherein R_1 and $R_2 = R_3$.
- 1 3. A cyclic compound according to claim 1 wherein

```
2 x is 0
3 y is 1
4 z is 2
5 q is 1
6 m is 0, and j is 0
```

- 8 4. A compound according to claim 3 wherein X is ¹⁸F, or ¹²³I.
- 1 5. A compound according to claim 3 wherein X is ¹⁸F.
- 1 8. A compound according to claim 1

9. A compound according to claim 8 wherein

```
2 x is 1
X is <sup>18</sup>F.
```

- 10. The compound of claim 8 wherein x is 0 and X is ^{123}I .
- 11. A compound according to claim 8 wherein x is 1 and X is 123 I.
- 1 12. A compound according to claim 1

```
2
                  wherein
                                 R_1 and R_2 = R_3
3
                                 x is 0
4
                                 y is 1
5
                                 z is 2
6
                                 q is 0
7
                                 m is 1
8
                                 n is 1
9
                                 j is 0, and
                                 X is <sup>18</sup>F, or <sup>123</sup>I.
```

1



A compound according to claim 1

```
2 wherein R_1 and R_2 = R_3

3 x is 1

4 y is 1

5 z is 1

6 q is 0

7 m and j are 0, and X is ^{18}F, or ^{123}I.
```

- 14. A compound according to claim 13 wherein X is 123 I.
- 1 15. A compound according to claim 1

```
2
                wherein
                             R_1 and R_2 = R_3
3
                             x is 0
4
                             y is 1
5
                             z is 2
6
                             q is 1
7
                            m is 1
8
                            n is 1
9
                            j is 1, and
                            X is 18F, or 123I.
```

- 16. The compound of claim 15 wherein X is 123 I.
- 1 17. A compound according to claim 1

```
2
               wherein
                            R_1 and R_2 = R_3
3
                            x is 0
4
                            y is 1
5
                            z is 2
6
                            q is 0
7
                            m is 0
8
                            j is 1, and
                            X is 18F, or 123I.
```

- 18. The compound of claim 17 wherein X is 123 I.
- 1 21. A compound according to claim 1



6 q is 1
7 m is 1
8 n is 1
9 j is 1, and
X is 18F, or 123I.

- 22. The compound of claim 21 wherein X is ¹⁸F.
- 23. The compound of claim 21 wherein X is 123 I.
- 1 24. A compound according to claim 1

2 wherein R_1 and $R_2 = R_3$ 3 x is 0 or 1 4 y is 2 5 z is 4 6 q is 0 7 m is 0 8 j is 1, and X is ¹⁸F, or ¹²³I.

- 25. The compound of claim 24 wherein X is ¹⁸F.
- 26. The compound of claim 24 wherein X is 123 I.
- 1 28. A compound according to claim 12 wherein X is ¹⁸F.
- 2 29. A compound of claim 1 wherein R_1 and $R_2 \neq R_3$.
- 3 30. A compound according to claim 29 wherein X is ¹⁸F.
- 4 31. A compound according to claim 1 wherein R_1 is X-CH=Ch-, R_2 is H, y is 1 and z is 2.
- 5 32. A compound of claim 31 wherein X is 123 I.